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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte HONGXIA JIN and JEFFREY BRUCE LOTSPIECH

Appeal 2015-005243
Application 12/038,773
Technology Center 2400

Before JEAN R. HOMERE, JEFFREY S. SMITH, and
BRUCE R. WINSOR, *Administrative Patent Judges*.

WINSOR, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants[1] appeal under 35 U.S.C. § 134(a) from the non-final rejection of claims 21 and 23, which constitute all of the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b). Claims 1–20, 22, and 24 are cancelled.[2] App. Br. 6, 17–18.

We reverse.

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[1] The real party in interest identified by Appellants is International Business Machines Corporation. App. Br. 4.

[2] In an apparent typographical error, Appellants indicate claim 21 is both pending and cancelled. *See* App. Br. 6. We treat claim 21 as pending and on appeal.

RELATED APPEALS

The instant appeal is related to Appeal 2015-005246, pertaining to Application 12/131,076. App. Br. 5. Appeal 2015-005246 is decided concurrently herewith.

STATEMENT OF THE CASE

Appellants' disclosed "invention generally relates to . . . protecting digital content from unauthorized use, and particularly to . . . identifying devices involved in piracy of digital content and revoking secret keys used to pirate protected digital content." Spec. ¶ 1. Claim 21, which is illustrative, reads as follows:

> 21. A method for a media device to decrypt protected content on media, said content being enabled to identify device keys in a compromised media device, comprising:
>
> processing a tree-based media key block to yield an initial value, wherein the tree-based media key block that has been divided into subtrees and a media device is associated with one of said subtrees;
>
> executing a key transformation program to transform the initial value into a media key variant, the media comprising said program;
>
> in response to the executing, the media device returning to the transformation program the media device's subtree identity;
>
> deriving title keys using the media key variant;
>
> decrypting said content using the title keys; and
>
> wherein said program: executes on said device when said device attempts to decrypt said content, transforms initial values into media key variations, and identifies to a content protection licensing agency

which subtree among said subtrees is associated with said device.

The Examiner relies on the following prior art in rejecting the claims:

Lotspiech et al. ("Lotspiech '701")	US 2002/0133701 A1	Sept. 19, 2002
Ishiguro et al. ("Ishiguro")	US 2003/0105956 A1	June 5, 2003
Bell et al. ("Bell")	US 2004/0156503 A1	Aug. 12, 2004
Doherty et al. ("Doherty")	US 2009/0092249 A1	Apr. 9, 2009

Claims 21 and 23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Doherty, Lotspiech '701, Bell[3], and Ishiguro. *See* Non-Final Act. 4–11.

Rather than repeat the arguments here, we refer to the Briefs ("App. Br." filed Nov. 14, 2014; "Reply Br." filed April 13, 2015) and the Specification ("Spec." filed Feb. 27, 2008) for the positions of Appellants and the Non-Final Office Action ("Non-Final Act." mailed July 8, 2014) and Examiner's Answer ("Ans." mailed Feb. 12, 2015) for the reasoning, findings, and conclusions of the Examiner.

ISSUE

The issue presented by Appellants' contentions is whether the combination of Doherty, Lotspiech '701, and Ishiguro teaches or suggests "protected content on media, . . . the media comprising said [key

[3] Although included in the summary ground of rejection (Non-Final Act. 4), Bell is not discussed or applied in the detailed rejections of claims 21 and 23 (*see generally* Non-Final Act. 4–11). *See* App. Br. 11.

transformation] program" (herein the "disputed limitation"), as recited in claim 21.

ANALYSIS

The Examiner finds Doherty teaches the disputed limitation. Non-Final Act 5–6 (citing Doherty ¶¶ 7, 29, Fig. 2); *see also* Ans. 2–10 (additionally citing Doherty ¶¶ 8–9, 27–28, 30–32, Figs. 1, 3; Spec. ¶¶ 41, 62). The Examiner explains that "[t]he key transformation program is generated during runtime of the DVD and stored/used in the DVD." Non-Final Act. 6. The Examiner further explains as follows:

> The application layer (which may be HDi or BD-J) which is stored on the HD DVD/Blu-Ray Disc, has an authoring environment that allows the procedural code and *the security layer (i.e., key transformation program code) to perform the key transformation*. The application layer and the security layer exist within the HD DVD/Blu-Ray Disc.

Ans. 6 (emphasis added). In other words, the Examiner maps the recited key transformation program to the process that transforms of the Media Key K_m (Doherty Fig. 3) to the Soft Media Key K_{sm} (*id.*) that occurs in Doherty's security layer 320 (*id.*), i.e., to the Advanced Encryption Standard One-Way Function AES-G (*id.*).

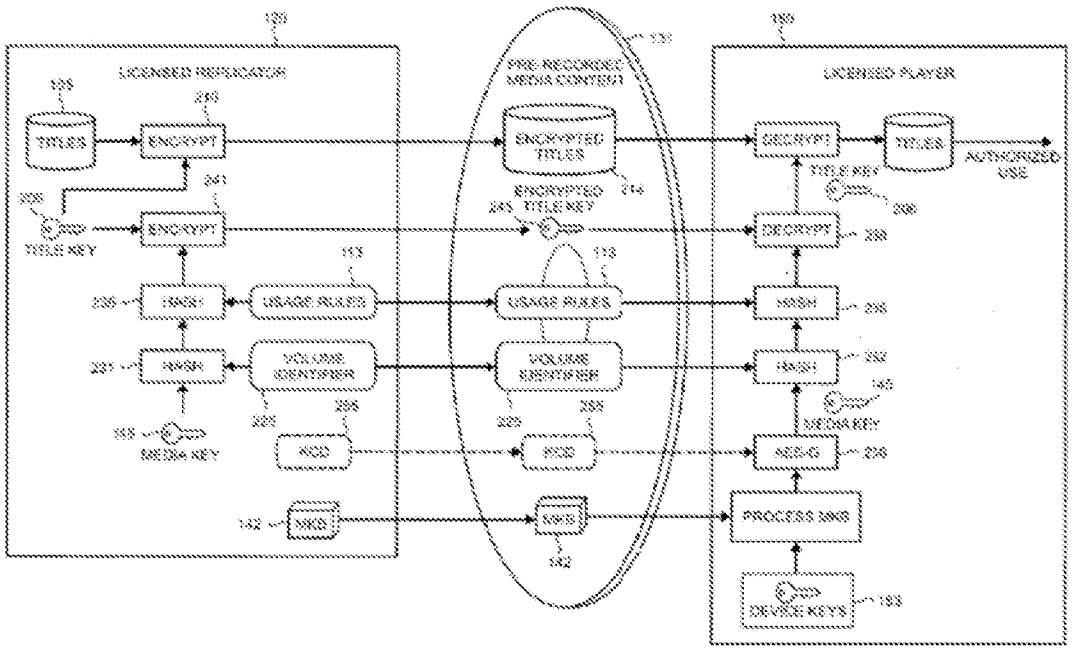
Appellants argue, *inter alia*, that Doherty does not teach or suggest that the key transformation program is located on the same media with the protected content. *See generally* App. Br. 12–15; Reply Br. 4–7. Accepting, that Doherty's AES-G teaches a key transformation program, we nonetheless agree with Appellants.

We first construe the disputed limitation. Claim construction is an issue of law that we review *de novo*. *Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1331 (Fed. Cir. 2009). We agree with Examiner that

the term "[m]edia is the plural version of medium, so it can certainly include multiple media." Ans. 3. We also agree with the Examiner that the memory of a media device falls within the broadest reasonable interpretation of "media." *See* Ans. 6. However, we do not agree that the term "media" can be read so broadly as to encompass "all media in a certain device, all media owned by a person, or even all media on earth." Ans. 3. Rather, the media recited in the claim is media on which there is protected (i.e., encrypted) content ("protected content on media"). The claim further recites that "the media [on which there is protected content] comprising said [key transformation] program." In other words, the claim requires that the same media have both protected content and the key transformation program. That the media may comprise more than one item of media does not change the claim's limitation to media on which both the protected content and the key transformation program are present.

We discuss the disputed limitation vis-à-vis Doherty by reference to Doherty's Figure 2, reproduced below.

FIG. 2



Doherty's Figure 2.

Doherty's Figure 2 above "shows details of the media content encryption and decryption under AACS" (Doherty ¶ 12) illustrating a licensed replicator that encrypts prerecorded media content onto an optical disc 131 (*id.* ¶ 20) and a licensed player 150 that unlocks the prerecorded encrypted content on the optical disc 131 (*id.* ¶ 21).

Although the Examiner asserts that "[t]he application layer and the security layer exist within the HD DVD/Blu-Ray Disc" (Ans. 6), the Examiner does not point to, nor do we find, any teaching of Doherty that the AES-G code 238 (Doherty Fig 2) is located on optical disc 131 (*id.*), which

includes encrypted titles 214 (*id.*) (i.e., protected content). Therefore, Doherty's optical disc 131 does not teach or suggest the disputed limitation.

Turning to Doherty's licensed player 150 (Doherty Fig 2) (i.e., media device), Doherty teaches that AES-G is located in licensed player 150, which one of ordinary skill in the art would understand to be located in the player's memory, i.e., on media. However, we find nothing in Doherty that teaches that the encrypted titles 214 are placed into the memory of licensed player 150. To be sure, Doherty (Fig. 2) does illustrate that "titles" are located within the licensed player 150, which one of ordinary skill would understand to suggest that the titles are in the memory of the licensed player 150, but these "titles" are decrypted titles and not the encrypted titles 214, i.e., not the *protected* content. Therefore, Doherty's media player 150 does not teach or suggest the disputed limitation.

We are persuaded that the Examiner errs in finding that Doherty, when combined with Lotspiech '701 and Ishiguro, teaches or suggests the disputed limitation. Therefore, we do not sustain the rejection of claim 21 and claim 23, which recites a limitation substantially similar to the disputed limitation and was rejected on substantially the same bases as claim 21 (*see* Non-Final Act. 11).

DECISION

The decision of the Examiner to reject claims 21 and 23 is reversed.

REVERSED